MIL-PRF-28876/31 4 October 2004

PERFORMANCE SPECIFICATION SHEET

CONNECTORS, FIBER OPTIC, CIRCULAR, RECEPTACLE STYLE, MULTIPLE REMOVABLE TERMINI, SCREW THREADS, EMI RETENTION NUT

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring fiber optic connectors described herein shall consist of this specification sheet and MIL-PRF-28876.

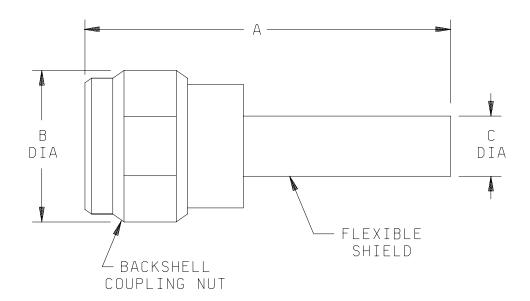


FIGURE 1. EMI retention nut.

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Shell Size	Shell size designator	Dimension A maximum	Dimension B (diameter) maximum	Dimension C (diameter) maximum
11	A	3.50 (88.9)	1.20 (30.5)	.40 (10.2)
13	В	3.50 (88.0)	1.20 (30.5)	.50 (12.7)
15	С	3.50 (88.9)	1.50 (38.1)	.60 (15.2)
23	F	3.50 (88.9)	2.25 (57.2)	1.00 (25.4)

NOTES:

- 1. Dimensions are in inches.
- Metric equivalents are given for general information only.
 Dimensions apply to plated/finished part.
 Metric equivalents (mm) are in parentheses.

- 5. For mating key dimensions, see figure A-7 of MIL-PRF-28876.
- 6. Backshell internal configuration not shown. The backshell interface dimensions shall be in accordance with figure A-7 of MIL-PRF-28876.

FIGURE 1. EMI retention nut - Continued.

REQUIREMENTS:

Dimensions and configurations: See figure 1 herein and MIL-PRF-28876, figure A-7. When mated to a plug or receptacle, the backshell shall hold the plug or receptacle insert in proper position (see MIL-PRF-28876, figure

Weight: 4 ounces (114g), maximum.

Fiber optic cable:

Cable diameter: .071 inch (1.80 mm) to .094 inch (2.39 mm).

Cleaning procedures: Each shipment of connectors shall include recommended cleaning procedures. The following wording or equivalent is recommended "To clean, use lint free wipe dampened with alcohol and blow dry with air."

Cable pull-out force: Not applicable.

Cable seal flexing: Not applicable.

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Twist: Not applicable.

External bending moment: Not applicable.

Impact: Not applicable.
Crush: Not applicable.

Water pressure: Not applicable.

Freezing water: Not applicable.

Sand and dust: Not applicable.

Electromagnetic effects: Applicable. The EMI retention nut shall be assembled to a MIL-PRF-28876/1 or MIL-PRF-28876/11 receptacle configured with a non-metallic insert. Electromagnetic effects testing shall be conducted without mating the MIL-PRF-28876/1 or MIL-PRF-28876/11 receptacle to a mating plug connector or dust cover.

Salt spray: Not less than 96 hours.

Fluid immersion: Not applicable.

Marking:

PIN: Marked on coupling ring of the backshell.



Mating counterpart: Backshell mates with MIL-PRF-28876/1 receptacle, MIL-PRF-28876/6 plug, and MIL-PRF-28876/11 receptacle.

Installation and removal tools: Adjustable or 1.25 inches (31.8 mm) open end wrench and strap wrench.

Qualification by similarity: If a manufacturer has previously qualified a connector backshell to MIL-PRF-28876/27, and candidate EMI retention nuts meet the visual and mechanical, size, weight, identification marking, workmanship, insertion loss, return loss, salt spray, fungus resistance, and ozone exposure inspections herein, then the candidate EMI retention nuts are qualified to this specification sheet. (Note that will be removed: the following tests were assessed as not requiring retest: vibration, shock, thermal shock, temperature humidity cycling, temperature cycling, and life aging.)

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NOTES:

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-PRF-28876, this specification sheet references the following documents:

MIL-PRF-28876/1 MIL-PRF-28876/6 MIL-PRF-28876/11 MIL-PRF-28876/27

CONCLUDING MATERIAL

Custodians:

Army - CR Navy - SH

Air Force - 11

DLA - CC

Review activities:

Navy - AS

Air Force - 13, 19, 93, 99

DIA - DI NASA - NA Preparing activity: Navy-SH

Agent: DLA - CC

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NOTE: The activities listed above were interested in this document on the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at http://www.dodssp.daps.mil/.